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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RICHARD J. DIBBS

Appeal 2008-1850
Application 10/618,971
Technology Center 3700

Decided: September 16, 2008

Before JENNIFER D. BAHR, LINDA E. HORNER, and DAVID B. WALKER, *Administrative Patent Judges*.

BAHR, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Richard J. Dibbs (Appellant) appeals under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 50-56, 86-97, and 100-109. We have jurisdiction over this appeal under 35 U.S.C. § 6 (2002).

The Invention

Appellant's claimed invention is directed to an apparatus and method for high-speed/high-volume handling and pasteurizing of shell eggs (Specification 1:8-11). Independent claims 50 and 56, reproduced below, are illustrative of the claimed invention.

> 50. An in-shell egg pasteurization system, comprising a spiral oven configured to increase a temperature of an in-shell egg to a first predetermined temperature for a predetermined time interval.
>
> 56. An in-shell egg pasteurization system, comprising:
>
> a cavity configured to increase a temperature of an in-shell egg in a non-batch manner to an elevated temperature for a time interval;
>
> a packer configured to pack the in-shell egg; and
>
> the egg entering the cavity prior to the packer.

The Rejections

The Examiner relies upon the following as evidence of unpatentability:

Scharfman	US 3,830,945	Aug. 20, 1974
Plemons	US 4,079,666	Mar. 21, 1978
Hwang	US 5,078,120	Jan. 7, 1992
Polster	US 6,113,961	Sep. 5, 2000
Ball	US 6,455,094 B1	Sep. 24, 2002

The following rejections are before us for review.

(1) claims 50, 52-54, and 87 under 35 U.S.C. § 102(b) as anticipated by Hwang;

(2) claims 56, 89-91, 94, 102, 105, and 106 under 35 U.S.C. § 102(b) as anticipated by Polster;

(3) claims 51, 55, and 101 under 35 U.S.C. § 103(a) as unpatentable over Hwang in view of Ball;

(4) claim 86 under 35 U.S.C. § 103(a) as unpatentable over Hwang in view of Plemons;

(5) claims 88, 92, and 97 under 35 U.S.C. § 103(a) as unpatentable over Polster in view of Ball;

(6) claim 93 under 35 U.S.C. § 103(a) as unpatentable over Polster in view of Plemons;

(7) claims 95, 100, 103, and 107-109 under 35 U.S.C. § 103(a) as unpatentable over Polster in view of Hwang;

(8) claim 96 under 35 U.S.C. § 103(a) as unpatentable over Polster in view of Scharfman; and

(9) claim 104 under 35 U.S.C. § 103(a) as unpatentable over Hwang in view of Scharfman.

OPINION

Rejection (1)

Appellant argues claims 50, 52-54, and 87 together as a group (Appeal Br.[1] 4). Thus, in accordance with 37 C.F.R. § 41.37(c)(1)(vii)

[1] We refer herein to the Appeal Brief ("Appeal Br."), filed November 7, 2007.

(2007), we select claim 50 as the representative claim to decide the appeal of this rejection, with claims 52-54 and 87 standing or falling with claim 50.

Appellant argues that Hwang does not anticipate the subject matter of claim 50 because (1) Hwang nowhere teaches or suggests pasteurizing in-shell eggs (Appeal Br. 4) and (2) cooking as disclosed in Hwang is not pasteurizing as recited in the present invention (Appeal Br. 5). That Hwang does not teach pasteurizing in-shell eggs is not in dispute. Rather, the issue before us is whether this demonstrates error in the Examiner's anticipation rejection. For the reasons that follow, we conclude that Appellant's argument fails to demonstrate error in the rejection.

Claim 50 is not directed to a process and does not require a step of pasteurizing in-shell eggs. Limitations not appearing in the claims cannot be relied upon for patentability. *In re Self*, 671 F.2d 1344, 1348 (CCPA 1982). The only reference to in-shell pasteurization in claim 50 is in the preamble, which recites an "in-shell egg pasteurization system." This language merely states a purpose or intended use of the invention and does not further define the invention. *See In re Paulsen*, 30 F.3d 1475, 1479 (Fed. Cir. 1994) (The preamble of a claim does not limit the scope of the claim when it merely states a purpose or intended use of the invention; however, terms appearing in a preamble may be deemed limitations of a claim when they give meaning to the claim and properly define the invention.)

It is well settled that the recitation of an intended use for an old product does not make a claim to that old product patentable. *In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997). Where the record reasonably supports a conclusion that the prior art product is capable of performing the recited function, the burden falls on the applicant to show

that the prior art structure does not inherently possess such capability. *See id.* at 1478. As evidenced by the following findings, the record reasonably supports such a conclusion.

According to Appellant's underlying disclosure, a spiral oven that increases the egg temperature to a temperature between 120°F and 140°F for a time interval of between 10 and 120 minutes using a heating medium of, for example, hot air, steam, other medium, or a combination thereof, is capable of pasteurizing in-shell eggs (Specification 18:31 to 19:3; fig. 9).

Hwang does not teach pasteurizing in-shell eggs. Hwang teaches a spiral oven configured to heat food product, such as chicken or poultry parts, hamburger patties, fish patties, vegetable foods and other food products that may be cooked in a predominately steam atmosphere, to a predetermined temperature for a predetermined time interval (col. 2, ll. 45-48; col. 9, ll. 30-51; col. 11, l. 53 to col. 12, l. 28). Hwang's oven is capable of providing a heating temperature of about 160°F to 200°F using steam only (col. 9, ll. 30-34), or higher temperatures such as between 200°F and 450°F when a burner is additionally used in combination with the steam (col. 9, ll. 37-43), and dwell times of, for example, 31 minutes (col. 12, ll. 5-6). Hwang thus appears to be fully capable of heating in-shell eggs to a temperature between 120°F and 140°F for a time of between 10 and 120 minutes.

Appellant does not allege, much less show, that Hwang's spiral oven lacks the capability to pasteurize in-shell eggs. Therefore, Appellant fails to persuade us the Examiner erred in rejecting claim 50 as anticipated by Hwang. We sustain the rejection of claim 50 and claims 52-54 and 87 standing or falling with claim 50.

Rejection (2)

Appellant argues for patentability of claims 56, 89-91, 94, 102, 105, and 106 together as a group (Appeal Br. 5-6). Therefore, we select claim 56 as the representative claim to decide the appeal of this rejection, with claims 89-91, 94, 102, 105, and 106 standing or falling with claim 56.

Appellant argues that Polster does not anticipate the subject matter of claim 56, because "Polster nowhere teaches or suggests non-batch pasteurization in any fashion" (Appeal Br. 5). According to Appellant, "the incorporation of individual flats (i.e., plural egg-holding trays) militates against the possibility of any type of non-batch process." *Id.* Appellant's argument is not commensurate with the scope of claim 56, because claim 56 does not require that eggs be pasteurized in a non-batch manner. Nor does claim 56 require either that eggs be transported through the cavity in a non-batch manner or structure for transporting eggs through the cavity. We understand Appellant's argument to be directed to the limitation in claim 56 of a cavity configured to increase a temperature of an in-shell egg in a non-batch manner. Accordingly, the issue before us is whether Polster teaches an in-shell pasteurization system having a cavity configured to increase a temperature of an in-shell egg in a non-batch manner.

Appellant contends that a "non-batch process" is "the 'successive' treatment of in-shell eggs in a progressing fashion" (Appeal Br. 5). However, that is not what claim 56 requires. Rather, claim 56 requires a cavity configured to increase a temperature of "*an* in-shell egg in a non-batch manner" (emphasis ours). A "batch" is "a number of things or persons taken as a group; lot; set." *Webster's New World Dictionary* 118 (David B. Guralnik ed., 2nd Coll. Ed., Simon & Schuster, Inc. 1984). Thus, we

construe a "non-batch manner," within the context of Appellant's invention, to be a process wherein items are taken one at a time.

Polster teaches an apparatus for pasteurizing in-shell eggs comprising a bath 30 having a cavity in which a heated fluid 40, which may be a liquid such as water or oil or one or more gases, is contained (col. 5, ll. 65-67; col. 8, ll. 50-67; col. 9, ll. 34-44). A gas is supplied through a supply line to perturbate the fluid 40 (col. 6, ll. 48-61). Polster teaches immersing eggs into the fluid 40 in batches in layers of flats held in carriers 300 in order to heat the eggs to pasteurize the eggs without substantially impairing their functionality (col. 5, ll. 60-65; col. 7, ll. 65-67; col. 12, ll. 6-64).

Although Polster does not teach doing so, a single egg could be immersed in the fluid 40 in bath 30 so as to have its temperature increased in a non-batch manner to an elevated temperature for a time interval. Likewise, eggs could be immersed successively, one at a time, in fluid 40 of bath 30. We thus find that Polster's bath 30 defines a cavity configured to increase a temperature of an in-shell egg in a non-batch manner to an elevated temperature for a time interval, as called for in claim 56. Anticipation does not require that the reference teach what the subject application teaches, but only that the claim read on something disclosed in the reference, i.e., that all of the limitations in the claim be found in or fully met by the reference. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 772 (Fed. Cir. 1983).

Appellant also argues that Polster does not teach an egg packer positioned downstream from a non-batch pasteurization cavity (Appeal Br. 6). We do not agree. As pointed out by the Examiner on pages 4 and 9 of the Answer, Polster teaches that after passing through the pasteurizer, eggs

are packaged (col. 14, ll. 62-65). Packaging of eggs requires a packer of some type. In this regard, we note that claim 56 does not specify what type of packer is used.

For the above reasons, Appellant's arguments do not demonstrate that the Examiner erred in rejecting claim 56 as anticipated by Polster. We sustain the rejection of claim 56 and claims 89-91, 94, 102, 105, and 106, which stand or fall with claim 56.

Rejection (3)

In contesting the rejection of claims 51, 55, and 101 as unpatentable over Hwang in view of Ball, Appellant groups claims 51, 55, and 101 together. Therefore, we select claim 51 as the representative claim to decide the appeal of this rejection as to claims 51 and 55, with claim 55 standing or falling with claim 51. Although Appellant does not separately argue in favor of the patentability of claim 101 apart from claims 51 and 55, we address claim 101 separately, for reasons more clearly explained below.

Appellant contends that Ball is purely scientific in nature and does not teach or suggest a cooler arranged downstream from a pasteurizing oven, as called for in claim 51 (Appeal Br. 6). Appellant concedes that Ball teaches or suggests cooling an egg following pasteurization (Appeal Br. 6-7). Appellant's only argument in contesting this rejection is that Ball's mere teaching that it may be desirable to cool an egg following pasteurization does not substantiate the incorporation of a cooler element into a line process for the purpose of establishing such cooling. *Id.* We do not agree.

Ball does more than merely teach that it may be desirable to cool an egg following pasteurization. Ball specifically teaches using refrigeration or, alternatively, spray or currents of cooled humidity controlled air to effect

such cooling (col. 8, ll. 58-61), that is, a cooler. Ball also teaches removing the eggs from the pasteurization apparatus and allowing them to cool either at room temperature or by some other means, such as direct refrigeration, a cold aqueous bath, or by currents of cooled humidity controlled air (col. 14, ll. 35-41). While other arrangements are possible, we find that a person of ordinary skill in the art would immediately envisage from this teaching a cooler downstream of the pasteurization apparatus into which the eggs are placed after removal from the pasteurization apparatus. After all, "[a] person of ordinary skill is also a person of ordinary creativity, not an automaton." *KSR Int'l. Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1742 (2007).

Moreover, claim 101 does not even require a cooler downstream of the pasteurization apparatus. Consequently, Appellant's argument is not even directed to a claimed feature of claim 101 and, thus, cannot be relied upon for patentability of claim 101.

In light of the above, Appellant's argument does not persuade us that the Examiner erred in rejecting claims 51, 55, and 101 as unpatentable over Hwang in view of Ball.

Rejection (4)

In contesting the rejection of claim 86 as unpatentable over Hwang in view of Plemons, Appellant points out that Plemons, like Hwang, has nothing to do with either pasteurizing or in-shell eggs (Appeal Br. 7). Appellant further argues that the pizza crust cooling mechanism of Plemons combined with the poultry cooking oven of Hwang does not render obvious the subject matter of claim 86, namely, an in-shell egg pasteurization system comprising a spiral oven and a spiral cooler arranged downstream of the

oven. (Appeal Br. 8). Appellant, however, does not specifically point out why claim 86 is patentable over the combination of Hwang and Plemons.

Hwang, as discussed above, teaches a spiral oven for cooking food products, which are not limited to poultry. Hwang also teaches that the oven is used in large production cooking environments wherein mass amounts of food product are desired to be cooked thoroughly (col. 1, ll. 6-10; col. 2, ll. 34-38). As pointed out above in our discussion of rejection (1), Hwang's spiral oven appears fully capable of pasteurizing in-shell eggs. Consequently, the recitation of an in-shell pasteurization system does not patentably distinguish Hwang's oven.

Plemons teaches a spiral cooler for cooling baked products from their cooked temperature to a temperature below ambient to retard mold growth on baked products intended to be stored at ambient or refrigerated temperatures in either sealed or unsealed packages (col. 1, ll. 11-14; col. 4, ll. 50-57). Plemons teaches particular application of the spiral cooler to partially baked pizza crusts (col. 1, ll. 15-23; col. 2, ll. 32-41). Such crusts are typically baked in large volumes and then shipped to distributors, often over considerable distances (col. 1, ll. 24-27).

While there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness, "the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *KSR*, 127 S. Ct. at 1741.

> When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a

> different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.

Id. at 1740. We must ask whether the improvement is more than the predictable use of prior art elements according to their established functions. *Id.*

Plemons provides a reason for a person of ordinary skill in the art to combine a spiral cooler with an oven, such as a spiral oven as taught by Hwang, downstream from the oven. A person of ordinary skill in the art would have readily appreciated that in situations where mass amounts of food are cooked in large production environments, of the type addressed by Hwang, for example, by manufacturers for shipping to distributors, it would be desirable to cool and refrigerate such foods after cooking to retard mold growth. Moreover, Appellant has not alleged, much less shown, that the provision of a spiral cooler as taught by Plemons downstream of a spiral oven as taught by Hwang would have been beyond the technical grasp of a person of ordinary skill in the art or would have yielded unpredictable or unexpected results. The combination of the spiral cooler of Plemons with the spiral oven of Hwang is nothing more than the predictable use of prior art elements according to their established functions.

In light of the above, Appellant fails to demonstrate error in the Examiner's determination that the subject matter of claim 86 would have

been obvious in view of the combination of Hwang and Plemons. We sustain the rejection.

Rejection (5)

Appellant argues in favor of claims 88, 92, and 97 together as a group (Appeal Br. 8). Therefore, we select claim 88 as the representative claim to decide the appeal of this rejection, with claims 92 and 97 standing or falling with claim 88.

Appellant's only argument against the rejection of claims 88, 92, and 97 as unpatentable over Polster in view of Ball is that "the general technical description of cooling eggs as taught in Ball does not support the holding of obviousness based upon Ball providing a downstream located cooler" (Appeal Br. 8). The issue presented by Appellant's argument appears to be the same one raised in connection with rejection (3), namely, whether Ball teaches or suggests providing a cooler downstream of a pasteurizing apparatus. As we pointed out in our discussion of rejection (3) above, we find that: (1) Ball specifically teaches providing a cooler for cooling the eggs after pasteurization and (2) a person of ordinary skill in the art would immediately envisage from Ball's teaching of removing the eggs from the pasteurization apparatus prior to cooling them an arrangement wherein the cooler is located downstream of the pasteurization apparatus. Consequently, we find no error in the Examiner's determination that it would have been obvious to provide a cooler as taught by Ball downstream of an egg pasteurizing apparatus as taught by Polster.[2]

[2] Our findings with respect to Polster are set forth above in our discussion of rejection (2).

In light of the above, Appellant's argument does not persuade us the Examiner erred in rejecting claim 88 as unpatentable over Polster in view of Ball. The rejection is sustained as to claim 88 and claims 92 and 97 standing or falling with claim 88.

Rejection (6)

In contesting the rejection of claim 93 as unpatentable over Polster in view of Plemons, Appellant simply states "Applicant again argues a lack of support in maintaining this rejection, again noting the deficiencies in the individual references discussed above" (Appeal Br. 9).

Appellant's statement does not specifically point out the deficiencies in the Examiner's position in rejecting claim 93 as unpatentable over Polster in view of Plemons. To the extent that Appellant's statement is an argument, it appears to be an attempt to argue the references individually, rather than the combination of references applied by the Examiner, and thus is not persuasive. Nonobviousness cannot be established by attacking the references individually when the rejection is predicated upon a combination of prior art disclosures. *See In re Merck & Co. Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). In any event, for the reasons cited above in our discussions of rejections (2) and (4), Appellant has not convinced us of any deficiencies in either Polster or Plemons with respect to the claimed subject matter.

We sustain the rejection of claim 93.

Rejection (7)

In contesting rejection (7), Appellant argues in favor of claims 95, 100, 103, and 107-109 together as a group (Appeal Br. 9). Therefore, we select claim 95 as the representative claim to decide the appeal of this

rejection, with claims 100, 103, and 107-109 standing or falling with claim 95.

Appellant's argument, as articulated on page 9 of the Appeal Brief, reads as follows:

> Systematic throughout the Examiner's rejections is the failure to carefully address each claim being rejected, or to adequately identify the proper reference being relied upon to sustain the rejection. Accordingly, and in response, Applicant merely realleges the Examiner's failure to support the rejection of the claims as being obvious.

Appellant's argument fails to specifically point out an error in the Examiner's rejection, which ostensibly relies on Polster for the temperature increasing cavity and on Hwang for a teaching to provide a spiral oven in Polster's cavity "in order to pasteurize[] [a] plurality of objects at the same time while passing through the oven" (Answer 6-7). We thus sustain the rejection of claim 95 and claims 100, 103, and 107-109, which stand or fall with claim 95, as unpatentable over Polster in view of Hwang.

Rejection (8)

Claim 96 depends from claim 56 and further requires that the temperature increasing cavity include a microwave oven. The Examiner relies on Scharfman for a teaching of a microwave oven in a temperature increasing cavity (Answer 7). In particular, the Examiner contends that it would have been obvious to a person of ordinary skill in the art to utilize a microwave oven in Polster's temperature increasing cavity in order to have a high heating temperature in a short time. *Id.*

Appellant argues that neither Polster nor Scharfman teaches or suggests a microwave oven in cooperation with a non-batch system

including the subsequent packer (Appeal Br. 9). This argument is not persuasive, because it attacks the applied references individually, rather than in combination as proposed by the Examiner.

Appellant additionally argues that neither Polster nor Scharfman teaches a packer at any step of the system (Appeal Br. 9). This argument is not persuasive. As pointed out in our discussion of rejection (2) above, we find that Polster does teach or suggest a packer downstream of the pasteurizing apparatus, i.e., downstream of bath 30.

For the above reasons, Appellant fails to persuade us the Examiner erred in rejecting claim 96 as unpatentable over Polster in view of Scharfman. We sustain the rejection.

Rejection (9)

In contesting this rejection, Appellant argues that "it is not seen how the microwave precooking/sterilizing device of Scharfman suggests application to the spiral poultry cooker in Hwang" (Appeal Br. 10). Accordingly, the issue presented in the appeal of the rejection of claim 104 as unpatentable over Hwang in view of Scharfman is whether Appellant demonstrates the Examiner erred in determining it would have been obvious to utilize in Hwang's oven a microwave generating element as taught by Scharfman in order to have a high heating temperature in a short time (Answer 7).

While the requirement of demonstrating a teaching, suggestion, or motivation (the TSM test established by the Court of Customs and Patent Appeals) to combine known elements in order to show that the combination is obvious may be "a helpful insight," it cannot be used as a rigid and mandatory formula. *KSR*, 127 S. Ct. at 1741.

Our findings with respect to Hwang are set forth above in our discussion of rejection (1). Of particular note is Hwang's teaching to use either a steam only environment or a combination of steam and a second source of heat, namely, a burner, to achieve higher temperatures. Additionally, Hwang's teachings are not limited to cooking poultry, as Appellant's argument implies. Rather, Hwang teaches use of the spiral oven for cooking any of a variety of food products that may be cooked in a predominantly steam atmosphere.

Scharfman teaches using an environment of steam in combination with a microwave element to heat product, particularly eggs, transported continuously in a conveyorized system for cooking and sterilization (col. 1, ll. 12-16 and 67-71).

The combination of a microwave heating element as taught by Scharfman with Hwang's spiral oven to raise the cooking temperature merely involves the simple substitution of one known element, namely, the microwave element, for another known element, namely, the burner mentioned by Hwang. *See KSR*, 127 S. Ct. at 1740. Additionally, the use of microwave heating in combination with steam for cooking eggs is predictable given the teaching by Scharfman of cooking eggs in such an environment. Moreover, Appellant has not shown that the substitution would have been beyond the technical grasp of a person of ordinary skill in the art. Nor has Appellant presented any other explanation or evidence showing why the combination proposed by the Examiner would not have been obvious.

In light of the above, Appellant does not demonstrate that the Examiner erred in determining that the subject matter of claim 104 would

have been obvious in view of the combined teachings of Hwang and Scharfman. We sustain the rejection of claim 104.

DECISION

The decision of the Examiner to reject claims 50-56, 86-97, and 100-109 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED

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